

WHAT IS CLAIMED IS:

- 1 1. A method for protecting a target circuit, the method comprising:
2 detecting power from a source of power;
3 coupling the power to the target circuit in a gradual manner;
4 detecting noise components in the power; and
5 varying the amount of power delivered to the target circuit in response to the
6 noise component.
- 1 2. The method of claim 1 wherein the step of coupling includes
2 controlling the conductivity of a transistor device, the transistor device having series-
3 connection between the source of power and the target circuit.
- 1 3. The method of claim 1 wherein the step of coupling includes
2 controlling the conductivity of a transistor device, the transistor device having series-
3 connection between the source of power and the target circuit.
- 1 4. A method for protecting a target circuit, the method comprising:
2 detecting power from a source of power;
3 coupling the power to the target circuit in a gradual manner;
4 detecting when a current supplied to the target circuit exceeds a threshold; and
5 decoupling the power in response to detecting that the current supplied to the
6 target circuit exceeds a threshold.
- 1 5. A circuit comprising:
2 a switch configured to couple a target circuit with a source of power;
3 a first detector configured to detect power provided by the source of power,
4 the first detector operatively coupled with the switch, wherein the switch closes responsive to
5 the first detector; and
6 a second detector configured to detect noise in the power, the second detector
7 operatively coupled to the switch, wherein a conductivity of the switch varies responsive to
8 the second detector.
- 1 6. The circuit of claim 5 wherein the second detector couples between the
2 source of power source and a gate of the switch.

1 7. The circuit of claim 5 further including a positive terminal and a
2 negative terminal, wherein the switch is a transistor device having a gate, a source, and a
3 drain, wherein the second detector comprises:
4 a bias voltage source;
5 an operational amplifier having:
6 an inverting input coupled with the positive terminal and coupled with
7 the bias voltage source;
8 a non-inverting input coupled with a negative terminal; and
9 an output coupled to the gate of the switch.

1 8. The circuit of claim 7 wherein the output of the operational amplifier
2 couples with the first detector.

1 9. The circuit of claim 7 wherein the bias voltage source coupled with the
2 first detector.

1 10. The circuit of claim 9 wherein the bias voltage source is a voltage
2 divider.